Montana Department of Natural Resources and Conservation
Water Resources Division
Water Rights Bureau

ENVIRONMENTAL ASSESSMENT
For Routine Actions with Limited Environmental Impact

Part I. Proposed Action Description

1. *Applicant/Contact name and address*: Leonard E. Marshall Family Trust

2. *Type of action*: Application for Beneficial Water Use Permit 76LJ 30067603

3. *Water source name*: Flathead River

4. *Location affected by project*: NW ¼ Section 4, Township 27N, Range 20W, Flathead County

5. *Narrative summary of the proposed project, purpose, action to be taken, and benefits:* The DNRC shall issue a water use permit if an applicant proves the criteria in 85-2-311 MCA are met.

   The applicant proposes to divert water from the Flathead River, by means of a pump, from April 15 through October 15 at 2.52 CFS (1,130 GPM) up to 279.4 AF, from a point in the NE¼NE¼SW¼ of Section 4, Township 27N, Range 20W, Flathead County, for irrigation use from April 15 through October 15. The applicant proposes to irrigate 151 acres in the NE¼ of Section 5, Township 27N, Range 20W, Flathead County, and is approximately 7.5 miles southeast of Kalispell.

6. Agencies consulted during preparation of the Environmental Assessment:
   (include agencies with overlapping jurisdiction)

   Montana Natural Heritage Program
   Natural Resources and Conservation Service soil maps
   Montana Department of Environmental Quality
   United States Fish and Wildlife Wetland Mapper
   Department of Fish, Wildlife and Parks

Part II. Environmental Review

1. Environmental Impact Checklist:

PHYSICAL ENVIRONMENT

WATER QUANTITY, QUALITY AND DISTRIBUTION

Water quantity *- Assess whether the source of supply is identified as a chronically or periodically dewatered stream by DFWP. Assess whether the proposed use will worsen the already dewatered condition.*

Determination: The source is not identified as chronically or periodically dewatered by DFWP.

Water quality *- Assess whether the stream is listed as water quality impaired or threatened by DEQ, and whether the proposed project will affect water quality.*

Determination: Flathead Lake is listed by the DEQ as having aquatic life as an impaired use with further data needing to be collected. This impairment seems to be caused by a mixture of sources including upstream impoundments, atmospheric deposition, unspecified urban stormwater and municipal point source discharges. These probable sources bring mercury, nitrogen, phosphorus, polychlorinated biphenyls and sedimentation/siltation to the source. It would seem that this appropriation from upstream Flathead River would not likely increase impairment of the source.

Groundwater *- Assess if the proposed project impacts ground water quality or supply. If this is a groundwater appropriation, assess if it could impact adjacent surface water flows.*

Determination: N/A

DIVERSION WORKS *- Assess whether the means of diversion, construction and operation of the appropriation works of the proposed project will impact any of the following: channel impacts, flow modifications, barriers, riparian areas, dams, well construction.*

Determination: The proposed diversion will consist of a Cornell 75 HP river pump that will convey water through a 10-inch pipeline to the center pivot system at 125 psi for a distance of 4,100 feet. The pivot will consist of 8 spans and one retractable swing arm. The drop piping will have 121 Nelson #20 sprinklers. System specifications included in the application showed it will take 80.6 hours to apply 1 inch of water or 74.7 days of continual irrigating with an 80% system efficiency. Period of use consists of 183 days. According to Alberta Ag-Info Centre, the range of efficiencies for a pivot, high pressure system is 75 – 90% while the DNRC standard is 70%. An 80% efficiency rating is reasonable for this region and system. Orvis Irrigation of Kalispell designed the system and design and pump specifications were included in the application.

UNIQUE, ENDANGERED, FRAGILE OR LIMITED ENVIRONMENTAL RESOURCES

Endangered and threatened species *- Assess whether the proposed project will impact any threatened or endangered fish, wildlife, plants or aquatic species or any "species of special concern," or create a barrier to the migration or movement of fish or wildlife. For groundwater, assess whether the proposed project, including impacts on adjacent surface flows, would impact any threatened or endangered species or "species of special concern."*

Determination: The Montana Natural Heritage Program was contacted to determine if there are any threatened or endangered fish, wildlife, plants or aquatic species or any "species of special concern", that could be impacted by the proposed project. They identified the following animal and plant species that are threatened, or have special status, that are located regionally: Great Blue Heron, Brown Creeper, Pileated Woodpecker, Cassin's Finch, Common Tern, Pygmy Whitefish, Bull Trout, Lake Trout, Bristly Sedge, Guadalupe Water-nymph and Columbia Water-meal. These species are found throughout this region and not necessarily at this particular spot. No immediate impact.

Wetlands - *Consult and assess whether the apparent wetland is a functional wetland (according to COE definitions), and whether the wetland resource would be impacted.*

Determination: The place of use is not located within a designated wetland boundary.

Ponds - *For ponds, consult and assess whether existing wildlife, waterfowl, or fisheries resources would be impacted.*

Determination: No pond. No impact.

GEOLOGY/SOIL QUALITY, STABILITY AND MOISTURE - *Assess whether there will be degradation of soil quality, alteration of soil stability, or moisture content. Assess whether the soils are heavy in salts that could cause saline seep.*

Determination: The proposed place of use is composed mainly of Upper Flathead Valley Area Somers silt loam and silty clay loam with 0 to 3 percent slopes. This soil is moderately well drained with a moderately high transmissivity and is considered nonsaline to very slightly saline. No impact to soil quality or alteration of soil stability is expected.

VEGETATION COVER, QUANTITY AND QUALITY/NOXIOUS WEEDS - *Assess impacts to existing vegetative cover. Assess whether the proposed project would result in the establishment or spread of noxious weeds.*

Determination: This is private land and it is ultimately the owner's responsibility to keep noxious weeds under control. Applicant's plan is to irrigate this 151 acres.

AIR QUALITY - *Assess whether there will be a deterioration of air quality or adverse effects on vegetation due to increased air pollutants.*

Determination: No impacts are anticipated.

HISTORICAL AND ARCHEOLOGICAL SITES - *Assess whether there will be degradation of unique archeological or historical sites in the vicinity of the proposed project if it is on State or Federal Lands.*

Determination: N/A – project not located on State or Federal Lands.

DEMANDS ON ENVIRONMENTAL RESOURCES OF LAND, WATER, AND ENERGY - *Assess any other impacts on environmental resources of land, water and energy not already addressed.*

Determination: No other impacts were identified during this EA.

HUMAN ENVIRONMENT

LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS - *Assess whether the proposed project is inconsistent with any locally adopted environmental plans and goals.*

Determination: No inconsistency noted.

ACCESS TO AND QUALITY OF RECREATIONAL AND WILDERNESS ACTIVITIES - *Assess whether the proposed project will impact access to or the quality of recreational and wilderness activities.*

Determination: No impact expected.

HUMAN HEALTH - *Assess whether the proposed project impacts on human health.*

Determination: No impact expected.

PRIVATE PROPERTY - *Assess whether there are any government regulatory impacts on private property rights.*
*Yes___ No **XXX** If yes, analyze any alternatives considered that could reduce, minimize, or eliminate the regulation of private property rights.*

Determination: No impact.

OTHER HUMAN ENVIRONMENTAL ISSUES - *For routine actions of limited environmental impact, the following may be addressed in a checklist fashion.*

Impacts on:

(a) Cultural uniqueness and diversity? None identified.

(*b) Local and state tax base and tax revenues?* None

(c) Existing land uses? None

(*d) Quantity and distribution of employment?* None

(e) Distribution and density of population and housing? None

(f) Demands for government services? None

(g) *Industrial and commercial activity?* None

(h) *Utilities?* None

(i) *Transportation?* None

(j) *Safety?* None

(k) *Other appropriate social and economic circumstances?* None identified.

2. ***Secondary and cumulative impacts on the physical environment and human population:***

Secondary Impacts None identified.

Cumulative Impacts None identified.

3. ***Describe any mitigation/stipulation measures:*** None identified.

4. ***Description and analysis of reasonable alternatives to the proposed action, including the no action alternative, if an alternative is reasonably available and prudent to consider:***

PART III. Conclusion

1. ***Preferred Alternative***

Project should be completed as explained in application

2 ***Comments and Responses***

3. ***Finding:***

*Yes___ No **XXX** Based on the significance criteria evaluated in this EA, is an EIS required?*

If an EIS is not required, explain why the EA is the appropriate level of analysis for this proposed action: Action is property regulated by other agencies.

Name of person(s) responsible for preparation of EA:

Name: Kathy Olsen
Title: Water Resource Specialist
Date: March 21, 2014